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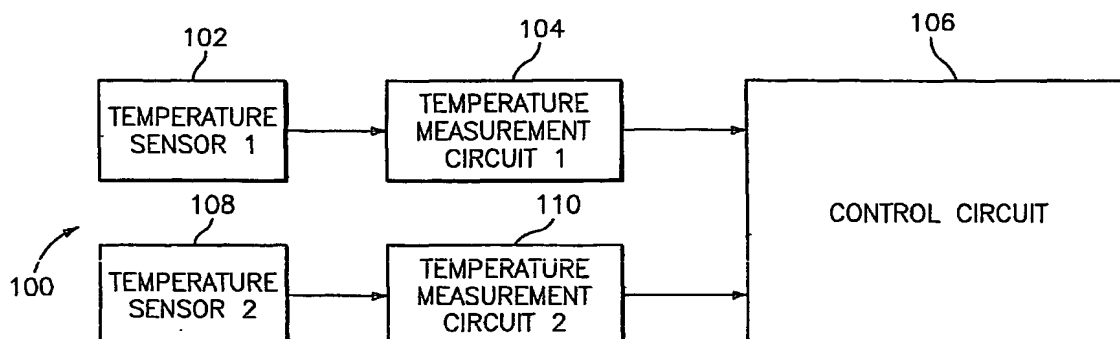
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(54) Title: REDUNDANT TEMPERATURE MONITORING IN ELECTROSURGICAL SYSTEMS FOR SAFETY MITIGATION



(57) Abstract: A redundant temperature monitoring system and method for an electrosurgical system are provided. The temperature monitoring circuit includes at least one temperature sensor for sensing a temperature at a measuring point, a first temperature measurement circuit coupled to the at least one temperature sensor for generating a first temperature value, a second temperature measurement circuit coupled to the at least one temperature sensor for generating a second temperature value, and a control circuit for determining a difference between the first and second temperature values and for comparing the difference to a first predetermined threshold. If the difference is greater than the first predetermined threshold, the control circuit generates a warning signal. If the difference is greater than a second predetermined threshold, the control circuit generates an alarm signal and/or shuts down a power source of the electrosurgical system.